

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/111912 A1

(51) International Patent Classification⁷: G06F 21/00,
G11B 20/00, 20/18

(21) International Application Number:
PCT/GB2004/002517

(22) International Filing Date: 11 June 2004 (11.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0313768.4 13 June 2003 (13.06.2003) GB

(71) Applicant (for all designated States except US): MACRO-
VISION EUROPE LIMITED [GB/GB]; Woodley House,
Crockhamwell Road, Woodley, Reading, Berkshire RG5
3JP (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): DOYLE, William,

Henry, Christopher [IE/GB]; Flat 2, 18 Western Elms
Avenue, Reading, Berkshire RG30 2AN (GB).

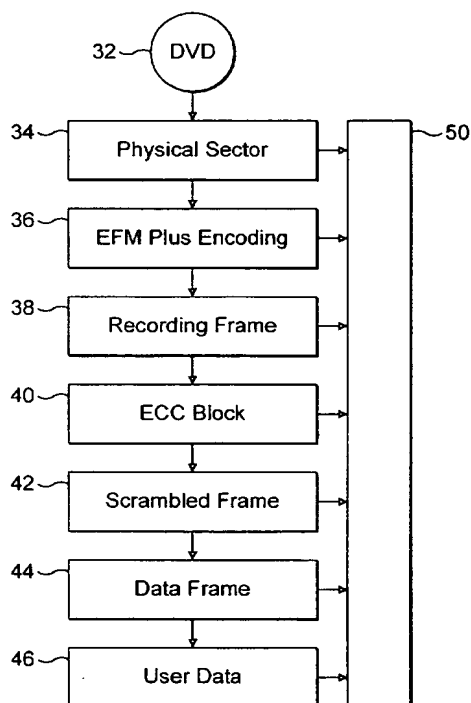
(74) Agent: NEEDLE, Jacqueline; W. H. Beck, Greener &
Co., 7 Stone Buildings, Lincoln's Inn, London WC2A 3SZ
(GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: COPYING COPY PROTECTED OPTICAL DISCS



(57) Abstract: To copy a copy protected DVD (32), and thereby subvert the copy protection technique, a DVD drive (50) is controlled by a disc copying program (54) to access data at a level other than that at the user data level. For example, if it is the data frame (44) which is read, the DVD drive (50) is controlled to write a data frame (12) to a copy disc (52). During the copying process, the program (54) may be arranged to remove sector IDs and error detection codes from the read data frames (44) and to generate new sector IDs and appropriate ID error detection codes for the data frames (12) to be written to the copy disc (52). This circumvents any copy protection which has been incorporated in the identification data in a data frame of the original disc (52).

WO 2004/111912 A1

WO 2004/111912 A1



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*